# (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



# 

(43) International Publication Date 12 February 2004 (12.02.2004)

# (10) International Publication Number WO 2004/012729 A1

(51) International Patent Classification7: A61K 31/366. 31/37, A61P 7/06

(21) International Application Number:

PCT/IB2003/003462

(22) International Filing Date: 30 July 2003 (30.07.2003)

(25) Filing Language:

Italian

(26) Publication Language:

English

(30) Priority Data: TO2002A000684

31 July 2002 (31.07.2002)

- (71) Applicants (for all designated States except US): UNI-VERSITA' DEGLI STUDI DI FERRARA [IT/IT]; Via Savonarola, 9, I-44100 Ferrara (IT). ASSOCIAZIONE VENETA PER LA LOTTA ALLA TALASSEMIA [TT/TT]; c/o Centro Microcitemia dell'Azienda ULSS 18, I-45100 Rovigo (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BIANCHI, Nicoletta [IT/IT]; Via G. Matteotti, 10/A, I-44020 Mezzogoro (IT). BORGATTI, Monica [IT/IT]; Via Menotti Cova, 6, I-44100 Ferrara (IT). GAMBARI, Roberto [IT/IT]; Via Normandia, 17, I-40132 Bologna (IT). LAMPRONTI, Ilaria [IT/IT]; Via Cantarana, 3, I-44100 Ferrara (IT).
- (74) Agents: RAMBELLI, Paolo et al.; Jacobacci & Partners SpA, Corso Regio Parco, 27, I-10152 Torino (IT).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- of inventorship (Rule 4.17(iv)) for US only

### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: USE OF ANGELICIN AND OF ITS STRUCTURAL ANALOGUES FOR THE TREATMENT OF THALASSEMIA

(57) Abstract: The use of angelicin and its structural analogues for the preparation of a medicament for the therapeutic treatment of beta-thalassaemia is described. A structural analogue which is particularly preferred for this purpose is bergapten.